

Safety and Health Services Division

Industrial Hygiene Group April 2002

HOW YOU CAN

HELP

CONTROL

MOLD GROWTH

INDOORS

Keeping humidity and moisture problems under control is the main way to prevent mold build-up.

Mold is found virtually everywhere – both indoors and outdoors. Everyone is exposed to some amount of mold on a daily basis without evident harm. However, exposure to high concentrations of indoor mold over extended time periods may cause health problems such as sensitization and allergic responses.

Excessive moisture in materials such as sheetrock, wood, paper, particleboard, fiberglass insulation, carpeting, paint, plaster, etc. provides a medium for mold to grow. Mold will grow almost anywhere – behind walls, under floors, above ceilings, inside air conditioners and heating systems. The moisture can originate from a number of sources, including basements, crawlspaces, leaking roofs, improperly sealed window frames, leaking pipes, damp ground, condensation on cold surfaces, etc.

Moisture control decreases the potential for growth but other factors such as adequate air circulation should be maintained. Most indoor fungi grow best in stagnant air situations. However, positioning air movers (fans) near visible mold growth may spread the mold spores to other areas so vigilant inspection is necessary.

MOISTURE CONTROL

- Keep water out. Fix leaky plumbing and leaks in the building envelope as soon as possible.
- Maintain low indoor humidity below 60% relative humidity (RH), ideally 30-50%, if possible.
- Prevent condensation. Insulate walls and install storm or thermal pane windows to keep walls warm and limit condensation.
- Prevent moisture due to condensation by increasing surface temperature or reducing the moisture level in air (humidity). To increase surface temperature, insulate or increase air circulation. To reduce the moisture level in air, repair leaks, increase ventilation (if outside air is cold and dry), or dehumidify (if outdoor air is warm and humid). Dehumidifiers will effectively remove moisture from the air but must be kept clean in accordance with manufacturer's instructions or could become a source of mold growth.
- Cleaning, disinfecting and drying surfaces prevents mold growth. Mold will grow on damp surfaces within a couple of days at normal temperatures. Clean and dry wet or damp spots within 48 hours
- Don't let foundations stay wet. Provide drainage and slope the ground away from the foundation.
- Keep heating, ventilation and air conditioning (HVAC) drip pans clean, flowing properly and unobstructed. Change or clean air conditioner and furnace filters often.
- Maintain gutters and downspouts to prevent leakage of rainwater to the building interior.

VENTILATION CONTROL

- Ventilating with outdoor summer air typically increases the air's relative humidity inside.
- Increase the flow of air within the occupied spaces. Moving furniture away from walls and opening closet doors permits air circulation, which will limit mold growth.
- Vent moisture-generating appliances, such as stoves to the outside where possible.
- Reduce moisture migration into occupied spaces from crawl spaces by installing vents that provide constant ventilation year round. In extreme conditions use a power-driven exhaust fan for faster results
- Install exhaust fans in bathrooms, kitchens, utility rooms, locker rooms and showers opening windows slightly for fresh air intake if necessary. Allow wet clothing, towels, etc. to dry before storage.

INSPECTION AND CLEANING

- Continually inspect for visible mold growth and have removed as soon as possible.
- Perform regular building/HVAC inspections and maintenance as scheduled.
- Porous materials that have mold growth should be discarded. Materials such as hard plastic, glass, etc. can be cleaned and disinfected.
- Clean garbage pails, refrigerator drip trays and door seals often.
- Keep the inside of refrigerators free of old leftovers.